A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L9/06

According to International Patent Classification (IPC) or to both national classification and IPC

## **B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols) IPC 7 - H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	EP 0 518 315 A (MITSUBISHI ELECTRIC CORP) 16 December 1992 (1992-12-16) abstract column 7, line 4 - column 9, line 32; figures 1,2	1,4,9, 11,16
A	EP 1 191 737 A (AMPHION SEMICONDUCTOR LTD) 27 March 2002 (2002-03-27) abstract paragraph '0021! - paragraph '0031!; figure 3	1,4, 9-11,16
A	US 2002/131588 A1 (YANG YOON SEOK) 19 September 2002 (2002-09-19) abstract paragraph '0032! - paragraph '0058!; figures 2,6	1,11

"A" document defining the general state of the art which is not considered to be of particular retevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> <li>Date of mailing of the international search report</li> </ul>
2 September 2004	17/09/2004
Name and malling address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,  Fax: (+31–70) 340–3016	Authorized officer  Dujardin, C

## INTERNATIONAL SEARCH REPORT

IB2004/050850

	THE CHARLES CANOTINE ON	1B2004/050850
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SUTHERLAND I E: "MICROPIPELINES" COMMUNICATIONS OF THE ASSOCIATION FOR COMPUTING MACHINERY, ASSOCIATION FOR COMPUTING MACHINERY. NEW YORK, US, vol. 32, no. 6, 1 June 1989 (1989-06-01), pages 720-738, XP000256681 ISSN: 0001-0782 page 1, left-hand column, line 1 - right-hand column, line 4 page 4, left-hand column, line 4 - page 5, left-hand column, line 10; figure 3	2,6,12
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	•	•

## INTERNATIONAL SEARCH REPORT

IB2004/050850

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0518315	A	16-12-1992	JP JP DE DE EP US	2862030 4365240 69222090 69222090 0518315 5488661 5261003	A D1 T2 A2 A	24-02-1999 17-12-1992 16-10-1997 26-03-1998 16-12-1992 30-01-1996 09-11-1993
EP 1191737	Α	27-03-2002	EP US	1191737 2002041685		27-03-2002 11-04-2002
US 2002131588	A1	19-09-2002	KR	2002061718	Α	25-07-2002